



# Recombinant Protein Technical Manual

## Recombinant Mouse CD122/IL-2RB Protein (His Tag)

RPES4483

### Product Data:

**Product SKU:** RPES4483

**Size:** 5µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** P16297

### Protein Information:

**Molecular Mass:** 26.5 kDa

**AP Molecular Mass:** 45-54 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 90 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** CD122;IL5Rbeta;IL-2/15Rbeta;IL-2Rbeta;IL15Rbeta;p70

## Immunogen Information:

**Sequence:** Met1-Glu240

## Background:

Interleukin-2 receptor (IL-2R) also known as High affinity IL-2 receptor subunit beta, IL-2 receptor subunit beta, and IL-2RB, is involved in T cell-mediated immune responses. CD122/IL-2RB is present in 3 forms with respect to ability to bind interleukin 2. The low affinity form is a monomer of the alpha subunit and is not involved in signal transduction. The intermediate affinity form consists of an alpha/beta subunit heterodimer, while the high affinity form consists of an alpha/beta/gamma subunit heterotrimer. Both the intermediate and high affinity forms of CD122/IL-2RB are involved in receptor-mediated endocytosis and transduction of mitogenic signals from interleukin 2. CD122/IL-2RB expression was restricted to the earliest B220+ cells (CD43+CD24-; prepro B cells; fraction A) that proliferate vigorously to IL-2 in the absence of any stromal cells, but not to IL5. The high-affinity form of this receptor is expressed on activated T lymphocytes, activated B lymphocytes, and activated macrophages. CD122/IL-2RB plays a role in regulating normal lymphocyte development.